



August 2011

**DEPARTMENT OF EDUCATION**  
2010–2011 School Year Reports

Dear School Board Members and School Personnel:

This 2010–2011 MEA Summary Report contains the results of student achievement in science at grades 5 and 8, as well as disaggregations by student and school characteristics. This report, together with MEA individual student and item analysis reports, provides support for use in program evaluation and planning.

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State science accountability standards of Maine's *Learning Results*. The *Learning Results* contain goals for what all students should know and be able to do at certain times in their school careers and include the accountability standards that are assessed for each grade. The MEA science test is administered to students in grades 5 and 8 to meet state assessment requirements and the federal requirements of the *No Child Left Behind Act*.

MEA results reflect scores based on the common science test questions that are taken by the approximately 14,000 students in each grade level. Students' scores are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. More information about the MEA is available at [www.maine.gov/education/mea/index.htm](http://www.maine.gov/education/mea/index.htm).

Thank you for your continuing commitment to improve the quality and effectiveness of the instructional opportunities in your schools. These assuredly will help all students achieve the high standards of the *Learning Results* as demonstrated on classroom, district, and state assessments.

Sincerely,

Stephen L. Bowen  
Commissioner of Education



# Grade 8 Science State Report

Test Date: May 2011

## Contents of the Report

The report is divided into three main sections including a section describing the students tested and a separate section for the content area results.

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# May 2011 - Grade 8 MEA Science Test

## Grade Level Summary Report

State: Maine

Schools and SAUs administered the MEA Science tests to every enrolled student with the following exceptions: students who participated in the alternate assessment for the 2010–11 school year, students for whom a special consideration was granted through the state Department of

Education, and other students for reasons not approved. On this page, and throughout this report, results are only reported for groups of students that are larger than nine (9).

PARTICIPATION SUMMARY	Number			Percentage		
	School	SAU	State	School	SAU	State
Students enrolled			14,258			100
<b>Students tested</b> With an approved accommodation  Current LEP Students With an approved accommodation  IEP Students With an approved accommodation  <b>Students not tested in MEA</b> State Approved Alternate Assessment Special Consideration Other	Science			Science		
			13,831			97
			1,898			14
			308			2
			123			40
			2,045			15
			1,529			75
			427			3
			244			57
			204			84
			40			16
			183			43

## PERFORMANCE SUMMARY

State																								
Enrolled	Not Tested Approved	Not Tested Other	Tested	Level 4		Level 3		Level 2		Level 1		Mean Scaled Score	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled Score	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled Score
N	N	N	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
14,258	244	183	13,831	2,771	20	7,024	51	2,780	20	1,256	9	849												

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient

Note: Throughout this report, percentages may not total 100 since each percentage is rounded to the nearest whole number.

## Science Results

State: Maine

### Proficient with Distinction (Level 4)

The student's work demonstrates in-depth understanding of essential concepts in science, including the ability to make multiple connections among central ideas. The student's responses demonstrate the ability to synthesize information, analyze and solve difficult problems, and explain complex concepts using evidence and proper terminology to support and communicate logical conclusions. (Scaled Score 862–880)

### Proficient (Level 3)

The student's work demonstrates a general understanding of essential concepts in science, including the ability to make connections among central ideas. The student's responses demonstrate the ability to analyze and solve routine problems and explain central concepts with sufficient clarity and accuracy to demonstrate general understanding. (Scaled Score 842–860)

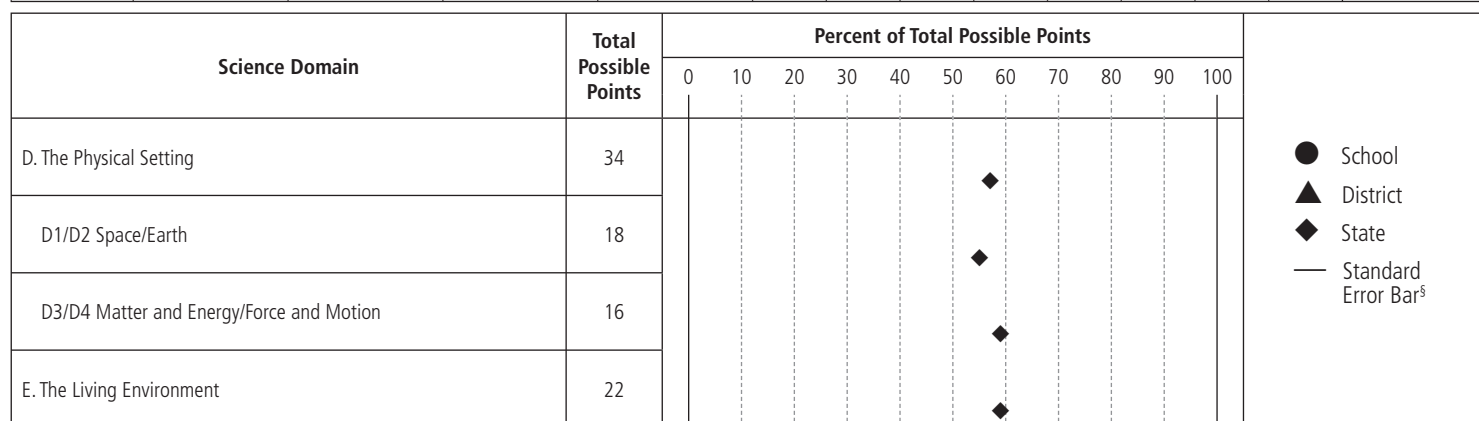
### Partially Proficient (Level 2)

The student's work demonstrates incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student's responses demonstrate some ability to analyze and solve problems but the quality of responses is inconsistent. Explanation of concepts may be incomplete or unclear. (Scaled Score 828–840)

### Substantially Below Proficient (Level 1)

The student's work demonstrates limited understanding of essential concepts in science and infrequent or inaccurate connections among central ideas. The student's responses demonstrate minimal ability to solve problems. Explanations are illogical, incomplete, or missing. There are many inaccuracies. (Scaled Score 800–826)

	Enrolled	Not Tested Approved	Not Tested Other	Tested	Level 4		Level 3		Level 2		Level 1		Mean Scaled Score
	N	N	N	N	N	%	N	%	N	%	N	%	
<b>SCHOOL</b> 2008-09 2009-10 <b>2010-11</b> Cumulative Total**													
<b>SAU</b> 2008-09 2009-10 <b>2010-11</b> Cumulative Total**													
<b>STATE</b> 2008-09 2009-10 <b>2010-11</b> Cumulative Total**	14, 804 14, 443 <b>14,258</b> 43, 505	* 247 <b>244</b> **	* 165 <b>183</b> **	14, 263 14, 031 <b>13,831</b> 42, 125	2, 155 2, 443 <b>2,771</b> 7, 369	15 17 <b>20</b> 17	6, 687 7, 635 <b>7,024</b> 21, 346	47 54 <b>51</b> 51	3, 672 2, 791 <b>2,780</b> 9, 243	26 20 <b>20</b> 22	1, 749 1, 162 <b>1,256</b> 4, 167	12 8 <b>9</b> 10	846 849 <b>849</b> 848



The MEA assesses students' science knowledge based on questions that measure the science accountability content strands highlighted in Maine's 2007 *Learning Results: Parameters for Essential Instruction*, which can be found at: <http://www.maine.gov/education/lres/pei/index.html>.

\* Data not previously calculated.

\*\* Percentages are calculated by dividing the cumulative total of students in the achievement level by the cumulative total of the number of students tested, when three years of data are available.

<sup>§</sup>The standard error bar indicates how much the percent of points earned could vary if the students were examined multiple times with the same test.



May 2011 - Grade 8 MEA

State: Maine

# Disaggregated Science Results

REPORTING CATEGORIES	State																								
	Enrolled	Not Tested Approved	Not Tested Other	Tested	Level 4		Level 3		Level 2		Level 1		Mean Scaled Score	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled Score	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled Score
	N	N	N	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	14,258	244	183	13,831	2,771	20	7,024	51	2,780	20	1,256	9	849												
Gender																									
Male	7, 442	150	109	7, 183	1, 642	23	3, 587	50	1, 292	18	662	9	850												
Female	6, 816	94	74	6, 648	1, 129	17	3, 437	52	1, 488	22	594	9	848												
Not Reported	0	0	0	0																					
Race/Ethnicity																									
Hispanic or Latino	134	3	0	131	18	14	62	47	38	29	13	10	846												
Not Hispanic or Latino																									
American Indian or Alaskan Native	181	1	2	178	39	22	92	52	27	15	20	11	849												
Asian	404	11	8	385	22	6	153	40	112	29	98	25	838												
Black or African American	194	5	1	188	24	13	87	46	54	29	23	12	845												
Native Hawaiian or Pacific Islander	12	0	0	12	5	42	3	25	4	33	0	0	856												
White	13, 235	222	169	12, 844	2, 647	21	6, 585	51	2, 516	20	1, 096	9	849												
Two or more races	98	2	3	93	16	17	42	45	29	31	6	6	847												
LEP Status																									
Currently receiving LEP services	324	8	8	308	7	2	95	31	99	32	107	35	834												
Former LEP student - monitoring year 1	18	0	1	17	2	12	13	76	2	12	0	0	853												
Former LEP student - monitoring year 2	14	0	0	14	2	14	11	79	1	7	0	0	852												
All Other Students	13, 902	236	174	13, 492	2, 760	20	6, 905	51	2, 678	20	1, 149	9	849												
IEP																									
Students with an IEP	2, 347	224	78	2, 045	125	6	659	32	687	34	574	28	837												
All Other Students	11, 911	20	105	11, 786	2, 646	22	6, 365	54	2, 093	18	682	6	851												
SES																									
Economically Disadvantaged Students	6, 116	137	126	5, 853	653	11	2, 856	49	1, 490	25	854	15	844												
All Other Students	8, 142	107	57	7, 978	2, 118	27	4, 168	52	1, 290	16	402	5	852												
Migrant																									
Migrant Students	3	0	0	3																					
All Other Students	14, 255	244	183	13, 828	2, 771	20	7, 023	51	2, 780	20	1, 254	9	849												
Title I																									
Students Receiving Title I Services	1, 143	10	14	1, 119	78	7	494	44	368	33	179	16	841												
All Other Students	13, 115	234	169	12, 712	2, 693	21	6, 530	51	2, 412	19	1, 077	8	849												
504 Plan																									
Students with a 504 Plan	417	4	13	400	81	20	213	53	75	19	31	8	850												
All Other Students	13, 841	240	170	13, 431	2, 690	20	6, 811	51	2, 705	20	1, 225	9	849												

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient

NOTE: Some numbers may have been left blank because fewer than ten (10) students were tested.